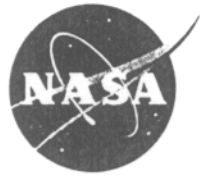


Headquarters

Washington, DC 20546-0001



FEB - 7 2001

Reply to Attn of YF

TO: Goddard Space Flight Center
Attn: 100/Director

FROM: Y/Associate Administrator for Earth Science

SUBJECT: Global Precipitation Measurement (GPM) Advanced Studies Support

Pursuant to fulfilling the intent of the Fiscal Year (FY) 2001 GPM budget appropriation language, I am directing the Goddard Space Flight Center (GSFC) to conduct GPM Advanced Studies. These Advanced Studies are to be structured to facilitate an anticipated approval-to-proceed with formal formulation activities in the future. Advanced Study expenditures charged to the Earth Science Enterprise shall not exceed \$2,000,000 during FY 2001.

To facilitate this process, a preliminary teaming structure has already been established and shall be retained, including a Code YF-chaired Steering Group (SG), a GSFC-chaired Advanced Studies Management Team (ASMT), and a Code YS-chaired ad hoc Science Team. The SG is charged with matters of policy, to steer GSFC's study activities, and to evaluate the readiness of study products for presentation to this office for approval. The ASMT is charged with developing all advanced study plans and delivering study plan results to the Enterprise. The ad hoc Science Team is charged with identifying and documenting science requirements.

In order to facilitate the headquarters coordination activity, GSFC shall coordinate all study activities with the assigned Code YF Program Executive (PE). The PE will coordinate the interface with this office and secure support from contributing Headquarters organizations. The PE is charged with providing GPM status to Enterprise management.

GSFC shall develop an Advanced Study Plan that shall be submitted for my approval and signature. The Advanced Study Plan shall address planning and execution of the following products and services:

1. Assist the Enterprise, through close coordination with the assigned Program Scientist and the science team to identify and baseline the GPM science requirements and scientific goals.

2. Conduct a technology readiness assessment of all candidate technologies that may be applicable to GPM, in coordination with the Earth Science Technology Office. Initiate and fund the study of key technologies as appropriate.
3. In keeping with system engineering best practices, conduct measurement concept trade studies that identify and consider multiple and unique measurement concepts for GPM. Ensure that mission safety and mission success aspects of the mission have been addressed in the mission concepts. Utilize the results of the trade studies to help the Enterprise finalize the Level 1 Requirements set.
4. Incorporate lessons learned into these advanced studies, especially with regard to planning, technology readiness assessment, project management, international partnerships, margin management (e.g., schedule, budget, and physical reserves), and risk management.
5. Conduct a partnership assessment to determine the full range of international, interagency, and intercenter partnership opportunities available to support GPM and an analysis of the risks associated with these partnerships.
6. Establish an acquisition strategy for acquiring major GPM elements.
7. Develop preliminary plans for environmental impact, orbital debris, and end-of-mission disposal compliance.
8. Provide monthly advanced study status reports to the NASA HQ PE.
9. Deliver a single status review to NASA HQ in August 2001. The review shall entail a detailed presentation of all GPM advanced study activities and progress to date and an assessment of the readiness of GPM to proceed with formal formulation.

The points of contact in the Earth Science Enterprise are:
 Program Executive - Mr. Mark Kowaleski at 202-358-0751
 Program Scientist - Dr. Ramesh Kakar at 202-358-0240.



Ghassem R. Asrar

cc:

Y/Dr. Cleave
 Y/Mr. Luther
 Y/Mr. Magner
 YF/Ms. Johnson
 YF/Mr. Kowaleski
 YB/Mr. Hunter

YB/Ms. White
 YS/Dr. Kaye
 YO/Dr. Thomas
 YS/Dr. Kakar
 GSFC/100.0/Ms. Kicza
 GSFC/740/Mr. Adams